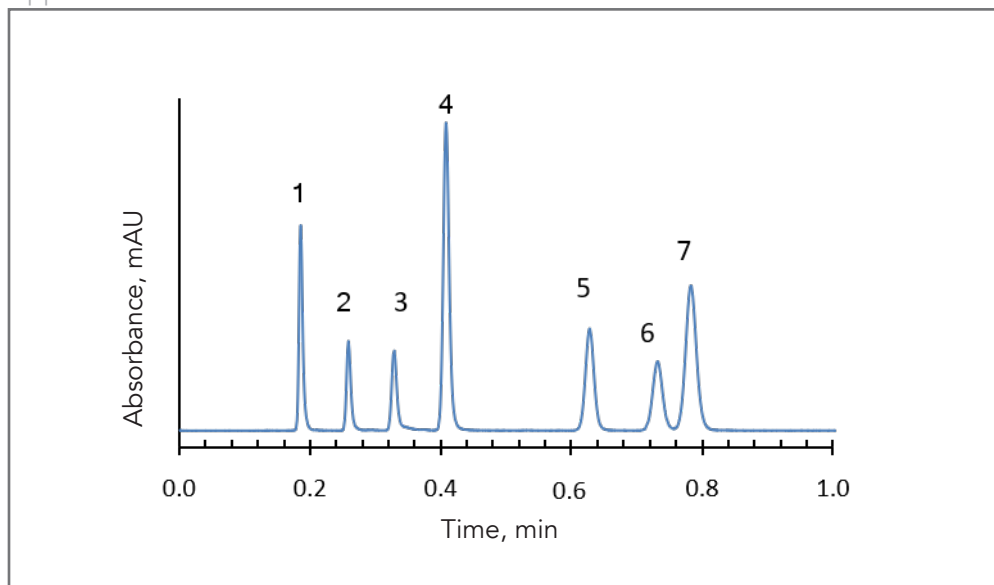




Isocratic Separation of Anilines on HALO[®] RP-Amide

Application Note 21-B



PEAK IDENTITIES:

1. p-Aminobenzoic acid
2. 1, 2-Phenylenediamine
3. p-Anisidine
4. Aniline
5. 3-Nitroaniline
6. 4-Chloroaniline
7. 2-Nitroaniline

In this separation on the HALO[®] RP-Amide phase, aniline and six derivatives can be separated isocratically in less than one minute. These and similar compounds are often used in the dyes industry.

TEST CONDITIONS:

Column: HALO 90 Å RP-Amide, 2.7 μm,
4.6 x 50 mm

Part Number: 92814-407

Mobile Phase: 60/40 - A/B

A: 0.02 M sodium phosphate buffer,
pH 7.0

B: Acetonitrile

Flow Rate: 2.0 mL/min

Pressure: 180 bar

Temperature: 25 °C

Detection: UV 254 nm, VWD

Injection Volume: 1.0 μL

Sample Solvent: 50/50 ACN/water

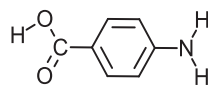
Response Time: 0.02 sec

Flow Cell: 2.5 μL semi-micro

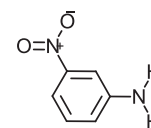
LC System: Shimadzu Prominence UFLC XR

Extra Column Volume: ~14 μL

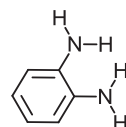
STRUCTURES:



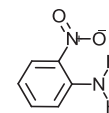
p-Aminobenzoic acid



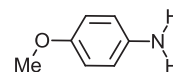
3-Nitroaniline



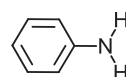
1,2-phenylenediamine



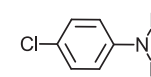
2-Nitroaniline



p-Anisidine



Aniline



4-Chloroaniline

